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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,295	06/26/2003	Yoshinari Sawabe	Q75965	2882
23373	7590	07/03/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				JOHNSON, EDWARD M
ART UNIT		PAPER NUMBER		
				1754

DATE MAILED: 07/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/606,295	SAWABE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Edward M. Johnson	1754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

- 1) Responsive to communication(s) filed on 31 January 2005.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

- 4) Claim(s) 1,2 and 4-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,2 and 4-17 is/are rejected.
- 7) Claim(s) 10 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. 09/819,790.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

**DETAILED ACTION**

***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a) - (d). The certified copies have been filed in parent Application No. 09/819,790, filed on 3/29/01.

***Claim Objections***

2. Claim 10 is objected to because of the following informalities: claim 10, line 2, "the a compound" appears incorrect. Examiner suggests --the compound--. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10, "the titanium hydroxide" lacks antecedent basis.

***Claim Rejections - 35 USC § 102***

Art Unit: 1754

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-2, 4-5, 8-9, 11-12, and 14-17 rejected under 35 U.S.C. 102(b) as being anticipated by Marsh 3,898,321.

Regarding claim 1, Marsh '321 discloses a process for making titania comprising treating with an exotherm of 47 degrees (see Example 1), and in the presence of ammonia gas (see column 3, lines 10-13), and wherein the product is dried and calcined (Example 1).

Regarding claim 2, Marsh '321 discloses calcining after treatment with ammonium compound (Example 1).

Regarding claim 4, Marsh '321 discloses calcining at 600 degrees (Example 1).

Regarding claim 5, Marsh '321 discloses gel and soft titania (see column 1, lines 5-12).

Regarding claims 8-9, Marsh '321 discloses stirring ammonia (Example 9).

Regarding claims 11-12, Marsh '321 discloses treatment with ammonia gas (column 3, lines 10-13) and calcining (Example 1).

Art Unit: 1754

Regarding claims 14-16, Marsh '321 discloses calcining at temperatures of 300-900 degrees C (see column 2, lines 33-35).

Regarding claim 17, Marsh '321 discloses 53 degrees C (Example 2).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marsh '321.

Regarding claim 6, Marsh fails to disclose steam.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use steam in the process of Marsh because Marsh discloses the presence of water (Examples) and treatment with ammonia gas (column 3, lines 10-13), which would motivate an ordinary artisan to use at least some gaseous water in the presence of the disclosed gaseous ammonia.

Regarding claim 10, it would have been obvious to one of ordinary skill in the art at the time the invention was made to generate an optimum amount of ammonia including 0.1-10% obtained through routine experimentation.

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marsh '321 as applied to claims 2 and 6 above, and further in view of WO99/40028 (translated in Hareyama US 6,231,981).

Marsh fails to disclose a fibrous shape.

Hareyama '981 discloses fibers (see Examples).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the fibrous shape of Hareyama in the titania of Marsh because Hareyama discloses the fibrous shape in a process for making titania, which has excellent reinforcing property, conductivity, and wear resistance (see column 1, lines 55-62).

10. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marsh '321 as applied to claims 1-2 and 11-12 above, and further in view of Yoshimoto et al. US 5,169,619.

Marsh fails to disclose titanium hydroxide.

Yoshimoto discloses titanium hydroxide (abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the titanium

Art Unit: 1754

hydroxide of Yoshimoto in the ammonia using titania production method of Marsh because Yoshimoto discloses the titanium hydroxide in a process for producing titanium oxide by adding ammonia (abstract, Examples), which titanium oxides have a large surface area and heat resistance, suitably used as catalyst carrier (see column 1, lines 45-54).

***Double Patenting***

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claims 1-2 and 4-17 are rejected on the ground of nonstatutory obviousness-type double patenting as being

Art Unit: 1754

unpatentable over claims 1-9 of U.S. Patent No. 6,827,922.

Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to one of ordinary skill in the art at the time the invention was made to claim heating in the presence of ammonia gas because the '922 patent claims calcining, which would motivate the ordinary artisan to heat in the presence of the already claimed ammonia gas.

***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Remy US 6,224,884 discloses a process for preparation of titanium oxide comprising heat-treating a hydrolyzed mixture of titanium chloride (see abstract and Examples).

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward M. Johnson whose telephone number is 571-272-1352. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Edward M. Johnson  
Primary Examiner  
Art Unit 1754

EMJ